



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,736	05/22/2006	Yukihiro Kiuchi	Q92480	7773
23373	7590	03/09/2011		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037		EXAMINER FEELY, MICHAEL J		
		ART UNIT 1761		PAPER NUMBER
		NOTIFICATION DATE 03/09/2011		DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com  
PPROCESSING@SUGHRUE.COM  
USPTO@SUGHRUE.COM

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/562,736	KIUCHI ET AL.
	<b>Examiner</b> Michael J. Feely	Art Unit 1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1)  Responsive to communication(s) filed on 30 December 2010.
- 2a)  This action is FINAL.      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4)  Claim(s) 1 and 5-55 is/are pending in the application.
  - 4a) Of the above claim(s) 20-50 is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) \_\_\_\_\_ is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) 1-5-19 and 51-55 are subject to restriction and/or election requirement.

#### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 30 December 2005 is/are: a)  accepted or b)  objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \* c)  None of:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5)  Notice of Informal Patent Application
- 6)  Other: \_\_\_\_\_

**DETAILED ACTION**

**Pending Claims**

Claims 1 and 5-55 are pending.

**Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 30, 2010 has been entered.

**Election/Restrictions**

2. Applicant's election without traverse of:
  - Group I (claims 1, 5-19, & 51-53; and newly added claims 54 & 55);
  - The phenol resin of formula (3); and
  - The epoxy resin of formula (11) in the reply filed on January 4, 2010 is acknowledged.
3. Claims 20-50 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 4, 2010.
4. The amendment entered with the request for continued examination on December 30, 2010 has necessitated a new species election requirement. Specifically, the previously elected phenol of formula (3) has been omitted from new claims 54 & 55; and the previously elected epoxy resin of formula (11) has been deleted from claim 1 and omitted from new claim 55.

Accordingly, the previous species election requirement (mailed December 4, 2009) has been withdrawn.

5. The elected invention of this application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

- For the curing agent, Applicant is required to elect one of the following species of phenol resin:
  - Phenol resin of Formula (3) (wherein  $10 < n < 75$ ) – **see claim 1**;
  - Phenol resin of Formula (4) (wherein  $10 < n < 75$ ) – **see claims 1, 54 & 55**;
  - Phenol resin of Formula (5) (wherein  $10 < n < 75$ ) – **see claims 1, 54 & 55**;
  - Phenol resin of Formula (6) (wherein  $10 < n < 75$ ) – **see claims 1, 54 & 55**;
  - Phenol resin of Formula (7) (*wherein  $10 < (m+m') < 75$* ) – **see claims 1, 54 & 55**;
  - Phenol resin of Formula (8) (*wherein  $10 < (m+m') < 75$* ) – **see claims 1, 54 & 55**;
- For the epoxy resin, Applicant is required to elect one of the following species of epoxy resin:
  - Epoxy resin of Formula (11) (*wherein  $0 \leq n \leq 10$* ) – **see claim 54**;
  - Epoxy resin of Formula (12) (*wherein  $0 \leq n \leq 10$* ) – **see claims 1, 54 & 55**;
  - Epoxy resin of Formula (13) (*wherein  $0 \leq n \leq 10$* ) – **see claims 1, 54 & 55**;
  - Epoxy resin of Formula (14) (*wherein  $0 \leq n \leq 10$* ) – **see claims 1, 54 & 55**;
  - Epoxy resin of Formula (15)\* (*wherein  $1 \leq (m+m') \leq 10$* ) – **see claims 1, 54 & 55**;

▪ Note\* it appears that this structure should feature an epoxy group – not a hydroxyl group.

- Epoxy resin of Formula (16) (*wherein 1≤(m+m')≤10*) – see claims 1, 54 & 55.

Applicant is required, in reply to this action, to elect a single species of curing agent and a single species of epoxy resin. The claims shall be restricted to these elected species if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

6. The claims are deemed to correspond to the species listed above in the following manner:

- Phenol resin species (3) is present in claims 1, 5-19, and 51-53.
- Phenol resin species (4)-(8) are present in claims 1, 5-19, and 51-55.
- Epoxy resin species (11) is present in claims 54 and 17-19.
- Epoxy resin species (12)-(16) are present in claims 1, 5-19, and 51-55.

No claims of the elected invention are generic with respect to the list of phenol resin species.

No claims of the elected invention are generic with respect to the list of epoxy resin species.

7. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: each of the phenol resin species and the epoxy resin

species are structurally distinct materials. Each distinct structure provides a distinct set of properties. Furthermore, there is nothing of record suggesting that they are obvious variations of one another.

8. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### **Response to Amendment**

10. The rejection of Claims 1, 6, 8-19, and 51-53, **based on the previously elected species**, under 35 U.S.C. 103(a) as being unpatentable over Kiuchi et al. (WO 01/42360 A1 or US Pat. No. 6,730,402 B2 or US 2003/0152776 A1) has been overcome by amendment.

11. The rejection of claim 5, **based on the previously elected species**, under 35 U.S.C. 103(a) as being unpatentable over Kiuchi et al. (WO 01/42360 A1 or US Pat. No. 6,730,402 B2 or US

2003/0152776 A1) in view of Nakamura et al. (US Pat. No. 6,645,630) has been overcome by amendment.

12. The rejection of claim 7, **based on the previously elected species**, under 35 U.S.C. 103(a) as being unpatentable over Kiuchi et al. (WO 01/42360 A1 or US Pat. No. 6,730,402 B2 or US 2003/0152776 A1) in view of Takada et al. (JP 2002-241590) has been overcome by amendment.

13. The rejection of claims 1, 6, 8-19, and 51-53, **based on the previously elected species**, on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the combined limitations of claims 27-29, 36-39, 58-66, and 69 of U.S. Patent No. 6,730,402 has been overcome by amendment.

14. The rejection of claim 5, **based on the previously elected species**, on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the combined limitations of claims 27-29, 36-39, 58-66, and 69 of U.S. Patent No. 6,730,402 in view of Nakamura et al. (US Pat. No. 6,645,630) has been overcome by amendment.

15. The rejection of claim 7, **based on the previously elected species**, on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the combined limitations of claims 27-29, 36-39, 58-66, and 69 of U.S. Patent No. 6,730,402 in view of Takada et al. (JP 2002-241590) has been overcome by amendment.

**Communication**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is (571)272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Feely/  
Primary Examiner, Art Unit 1761

March 3, 2011